

In the Claims:

1. A computer program product for execution by a server computer for performing resource pool size maintenance for an application server, comprising:

computer code for triggering a resource pool shrink check;

computer code for determining that pool shrinking is necessary;

computer code for reducing resources in an unavailable deque; and

computer code for reducing resources in an available deque.

2. The computer program product of claim 1 wherein said computer code for triggering a resource pool shrink check includes:

computer code for determining that a period of time has expired; and

computer code for performing the resource pool shrink check at the expiration of the period of time.

3. The computer program product of claim 2 wherein the period of time is set by a programmable attribute.

4. The computer program product of claim 1 wherein said computer code for determining that pool shrinking is necessary includes:

detecting resources contained in an available deque or a unavailable deque.

5. The computer program product of claim 1 wherein computer code for determining that pool shrinking is necessary includes:

computer code for determining the number of resources in the resource pool is greater than a maximum resource pool threshold value.

6. The computer program product of claim 5 wherein the maximum resource pool threshold value is set by a programmable attribute.

7. The computer program product of claim 1 wherein computer code for reducing resources in an unavailable deque includes:

computer code for reducing resources in an unavailable deque to coincide with a maximum unavailable resources threshold.

8. The computer program product of claim 7 wherein the reduced resources in the unavailable deque are destroyed.

9. The computer program product of claim 1 wherein computer code for reducing resources in an available deque includes:

computer code for reducing resources in an available deque to coincide with a maximum available resources threshold.

10. The computer program product of claim 9 wherein resources in the available deque are destroyed.

11. A computer program product for execution by a server computer for performing resource pool maintenance for an application server, comprising:

- computer code for triggering a test for pool resources;
- computer code for performing a test on pool resources; and
- computer code for refreshing pool resources based on the pool resources testing.

12. The computer program product of claim 11 wherein said computer code for triggering a test for pool resources includes:

- computer code for determining that a period of time has expired; and
- computer code for performing the resource pool shrink check at the expiration of the period of time.

13. The computer program product of claim 11 wherein said performing a test on pool resources includes:

- computer code for determining if pool resources are functioning properly, wherein the resources are refreshed if they are not functioning properly.

14. A computer program product for execution by a server computer for performing maintenance on connection pool dequeues in an application server, comprising:

- computer code for traversing an unavailable deque and a reserved deque;
- computer code for performing maintenance on the unavailable deque; and
- computer code for performing maintenance on the reserved deque.

15. The computer program product as claimed in claim 14 wherein said computer code for traversing an unavailable and a reserved deque includes:

computer code for determining what resources are available in the unavailable deque and the reserved deque.

16. The computer program product as claimed in claim 14 wherein said computer code for performing maintenance on the unavailable deque includes:

computer code for scheduling resource creation for each resource in the unavailable deque.

17. The computer program product as claimed in claim 14 wherein said computer code for performing maintenance on the reserved deque includes:

computer code for scheduling resource creation for each resource in the reserved deque.

18. A computer program product for execution by a server computer for performing resource creation in a connection pool in an application server, comprising:

computer code for generating a resource in connection pool;

computer code for confirming the generation of the resource in the connection pool;

computer code for moving the resource to an available deque;

19. The computer program product of claim 18 further comprising:

computer code for determining that a period of time has expired; and

computer code for generating a resource at the expiration of the period of time.